



DAHLQUIST et al
09/937,779

AMENDMENTS TO THE SPECIFICATION

On page 1, line 1, please delete the Title and add the following.

PROCESSES FOR PRODUCING TRIACYLGLYCEROL USING GENES THAT
ENCODE PHOSPHOLIPID:DIACYLGLYCEROL ACYLTRANSFERASES.

On page 1, line 5, please add the following.

BACKGROUND OF THE INVENTION

On page 2, line 33, please change the section title from “Summary of the invention” to the following.

BRIEF SUMMARY OF THE INVENTION

On page 3, line 15, please add the following.

DETAILED DESCRIPTION OF THE INVENTION

On page 36, line 1, please change the title of the abstract to all capital letters.

Please add the following on page 1, paragraph 1.

The current application claims priority from U.S. Provisional Application Number 60/180,687.

On page 12, paragraph beginning on line 20, please make the following changes to said paragraph. A clean copy A of the amended paragraph, contained on a new sheet, is included to show underlined words contained in the Specification as originally submitted.

General methods:

Yeast strains and plasmids. The wild type yeast strains used were either FY1679 (*MAT α his3-Δ2OO ieu2-Δ1 trp 1-Δ6 ura3-52*) or W303-1A (*MAT α ADE2-1 can1-100 his3-11,15 ieu2-3, 112 trp1-1 ura3-1*) (7). The YNROO8w::KanMX2 disruption strain FVKTOO4-04C(AL), which is congenic to FY1679, was obtained from the Euroscarf collection (8). A 2751 bp

fragment containing the YNROO8w gene with 583 bp of 5' and 183 bp of 3' flanking DNA was amplified from W303-1A genomic DNA using *Taq* polymerase with 5'-TCTCCATCTTCTGCAAAACCT-3' and 5'-CCTGTCAAAAACCTTCTCCTC-3' as primers. The resulting PCR product was purified by agarose gel electrophoresis and cloned into the *EcoRV* site of pBluescript pBLUESCRIPT (pbluescript-pdat). For complementation experiments, the cloned fragment was released from pBluescript pBLUESCRIPT by *Hind*III-*Sac*1 digestion and then cloned between the *Hind*III and *Sac*1 sites of pFL39 (9), thus generating pUS1. For overexpression of the FDAT gene, a 2202 bp *EcoR*I fragment from the pBluescript pBLUESCRIPT plasmid which contains only 24 bp of 5' flanking DNA was cloned into the *BamH*1 site of the *GAL1-TPK2* expression vector pJN92 (12), thus generating pUS4.

On page 20, paragraph beginning on line 19, please make the following changes to said paragraph. A clean copy **B** of the amended paragraph, contained on a new sheet, is included to show underlined words contained in the Specification as originally submitted.

Increased TAG content in seeds of Arabidopsis thaliana that express the yeast PDAT. For the expression of the yeast PDAT gene in *Arabidopsis thaliana* an *EcoR*I fragment from the pBluescript PDAT pBLUESCRIPT-PDAT was cloned together with napin promotor (25) into the vector pGPTV-KAN (26). A plasmid (pGNapPDAT) having the yeast PDAT gene in the correct orientation was identified and transformed into *Agrobacterium tumefaciens*. These bacteria were used to transform *Arabidopsis thaliana* columbia (C-24) plants using the root transformation method (27). Plants transformed with an empty vector were used as controls.

CLEAN SPECIFICATION PARAGRAPH A

Page 12, paragraph beginning on line 20.

General methods:

Yeast strains and plasmids. The wild type yeast strains used were either FY1679 (*MAT α his3-Δ2OO Ieu2-Δ1 trp 1-Δ6 ura3-52*) or W303-1A (*MAT α ADE2-1 can1-100 his3-11,15 Ieu2-3, 112 trp1-1 ura3-1*) (7). The YNROO8w::KanMX2 disruption strain FVKTOO4-04C(AL), which is congenic to FY1679, was obtained from the Euroscarf collection (8). A 2751 bp fragment containing the YNROO8w gene with 583 bp of 5' and 183 bp of 3' flanking DNA was amplified from W303-1A genomic DNA using *Taq* polymerase with 5'-TCTCCATCTTCTGCAAAACCT-3' and 5'-CCTGTCAAAACCTTCTCCTC-3' as primers. The resulting PCR product was purified by agarose gel electrophoresis and cloned into the *EcoRV* site of pBLUESCRIPT (pbluescript-pdat). For complementation experiments, the cloned fragment was released from pBLUESCRIPT by *Hind*III-*Sac*1 digestion and then cloned between the *Hind*III and *Sac*1 sites of pFL39 (9), thus generating pUS1. For overexpression of the FDAT gene, a 2202 bp *EcoR*1 fragment from the pBLUESCRIPT plasmid which contains only 24 bp of 5' flanking DNA was cloned into the *BamH*1 site of the *GAL1-TPK2* expression vector pJN92 (12), thus generating pUS4.

CLEAN SPECIFICATION PARAGRAPH B

Page 20, paragraph beginning on line 19.

Increased TAG content in seeds of Arabidopsis thaliana that express the yeast PDAT.

For the expression of the yeast PDAT gene in *Arabidopsis thaliana* an EcoRI fragment from the pBLUESCRIPT-PDAT was cloned together with napin promotor (25) into the vector pGPTV-KAN (26). A plasmid (pGNapPDAT) having the yeast PDAT gene in the correct orientation was identified and transformed into *Agrobacterium tumefaciens*. These bacteria were used to transform *Arabidopsis thaliana* columbia (C-24) plants using the root transformation method (27). Plants transformed with an empty vector were used as controls.